

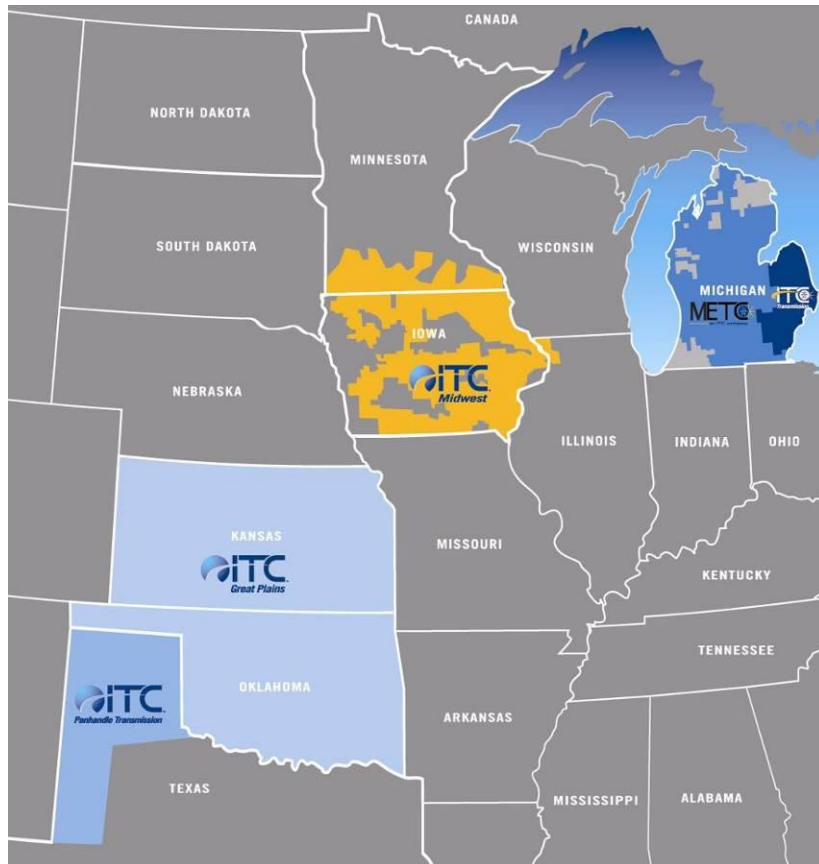


WIndiana 2009

July 21, 2009

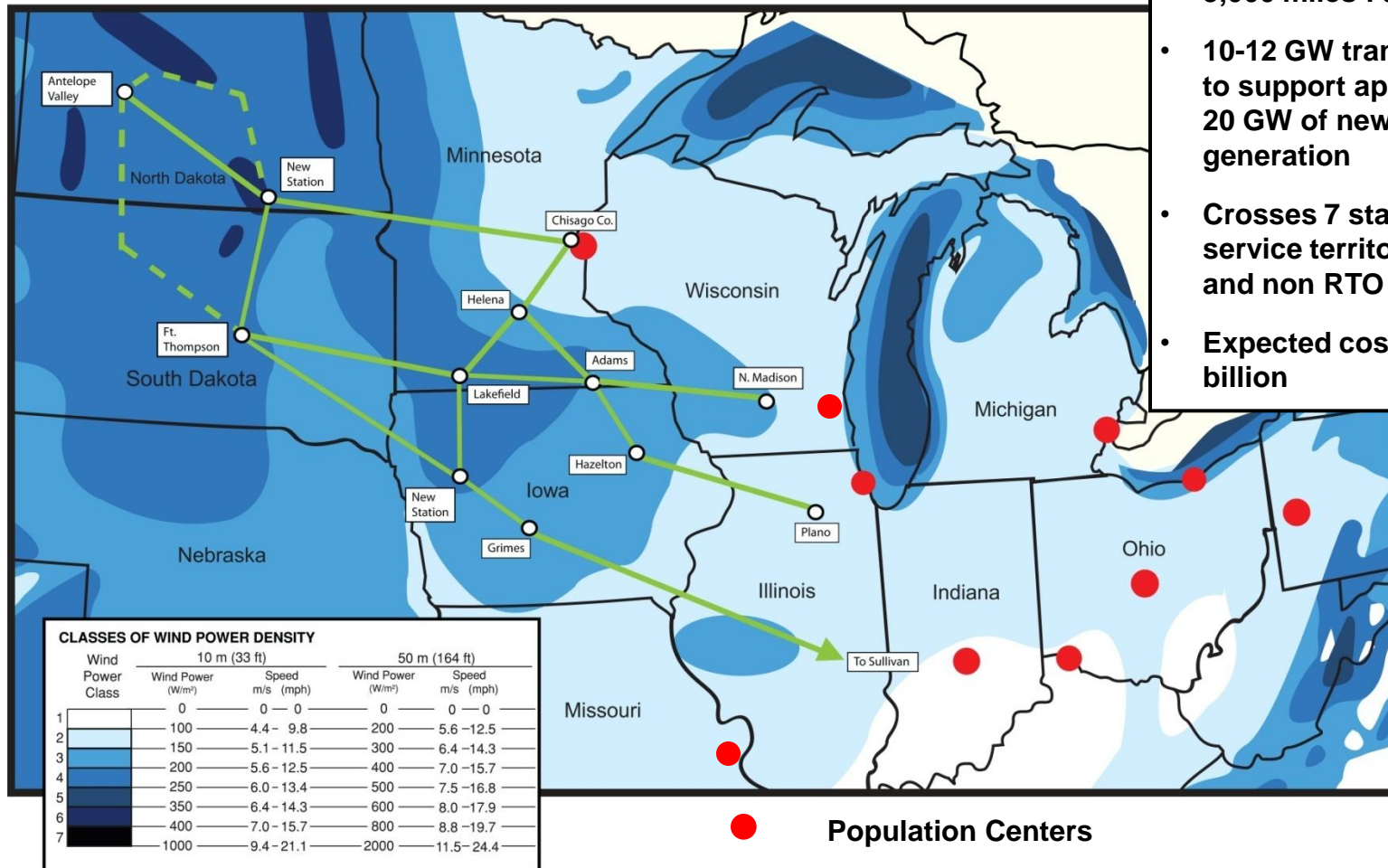


Who Is ITC?



- ◆ Only fully independent transmission company in the U.S.
- ◆ Eighth largest transmission-owning company in the U.S.
- ◆ Operate almost 15,000 miles of transmission serving peak load of over 25,000 MW.
- ◆ Established in March 2003 when DTE Energy sold transmission subsidiary *ITC Transmission*.
- ◆ Acquired Michigan Electric Transmission Company (METC) in October 2006.
- ◆ Acquired all transmission assets of Interstate Power & Light Company (IP&L) in December 2007 forming ITC Midwest.

Green Power Express



- 3,000 miles 765 kV
- 10-12 GW transfer capacity to support approximately 20 GW of new wind generation
- Crosses 7 states, 20 utility service territories, 2 RTOs and non RTO areas
- Expected cost of \$10-12 billion

Why GPE and Why Now?

President Obama's Vision



“One of... the most important infrastructure projects that we need is a whole new electricity grid. ... if we’re going to be serious about renewable energy, I want to be able to get wind power from North Dakota to population centers, like Chicago.”

Source: Transcript from appearance on Rachael Maddow Show of October 28, 2008:
<http://www.msnbc.msn.com/id/27464980/>.

Green Power Express Benefits

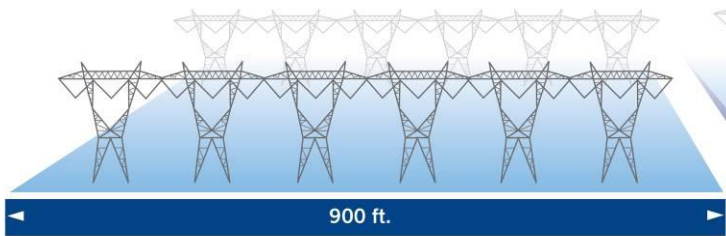


- ◆ Facilitates the movement of large amounts of high efficiency wind throughout the footprint
- ◆ Reduces carbon emissions by approximately 37 million metric tons annually, equivalent to seven to ten 600 MW coal plants or nine to twelve million automobiles
- ◆ Largely resolves Midwest ISO generation interconnection queue issues for region
- ◆ Efficient use of land
- ◆ Addresses concerns with system congestion as wind comes online
- ◆ Increases electric reliability

Why 765kV instead of 345kV?



VS



- ◆ 765 kV provides greatest capacity increases with least land consumption
 - One 765 kV facility can carry as much power as six 345 kV lines
 - Reduced right-of-way lowers cost as well as impacts to consumers and environment
- ◆ Supports competitive markets, reliability, and renewable energy development
- ◆ Power carried greater distances and facilitates renewable resources market
- ◆ Availability is greater than 99% of the time
- ◆ “On-ramps” and “off-ramps” provide for easy generation connections and future transmission integration

Why Not DC for GPE?



- ◆ DC is a good technology for certain applications, namely point to point without off ramps
 - GPE has a number of pick-up and drop-off points for power along the path
- ◆ DC does not allow for easy redirection of power in the case of a line outage
 - Could make system vulnerable from a reliability standpoint if used as a first step
 - May require a significant system below
- ◆ DC overlays may be required in the Eastern Interconnect once a robust backbone system exists to accommodate renewable development